

DEQ PM Notes: 09/01/2023 by SKingery

Boring water grab sample came back with detections of gasoline-range hydrocarbons greater than the Groundwater RBCs for vapor intrusion. Typically we would request them to delineate the extent and magnitude of the PVI source in groundwater...However, given the limiting physical restrictions of the location of the former UST I don't expect additional geoprobe borings to be feasible.

The priority is the safety of students inside the building. Additional work to determine the extent of the plume into the street can wait until foot and vehicle traffic are minimized (summer or winter break).

It is likely that the building Graff Hall, is directly above the groundwater plume. This would be Scenario#2 in the draft guidance

- Determine the distance between source and building foundation (and seasonal variability)
- Soil conditions relevant to gas transport and petroleum biodegradation
- Profiles of fixed gasses and PID measurements
- Soil vapor analytical data. (Sub slab data is preferred)

Check with the university for building plans and information on utilities in the vicinity of the plume.

Groundwater Results

Gasoline concentration of 1080 ug/L is above the groundwater RBC for ingestion & inhalation from tapwater for residential/urban residential and occupational.

Consult should confirm that water in this area is supplied by municipality in order to close this pathway.

If groundwater is not used for drinking, do we need to obtain additional groundwater samples or just soil vapor?

Is it acceptable to obtain soil vapor next to the building and then a groundwater sample in the street to determine the size of the groundwater plume?

They probably can't get any water samples closer to the building due to physical constraints but likely soil vapor.